Supplementary Material: High-frequency oscillations in epilepsy and surgical outcome. A meta-analysis.

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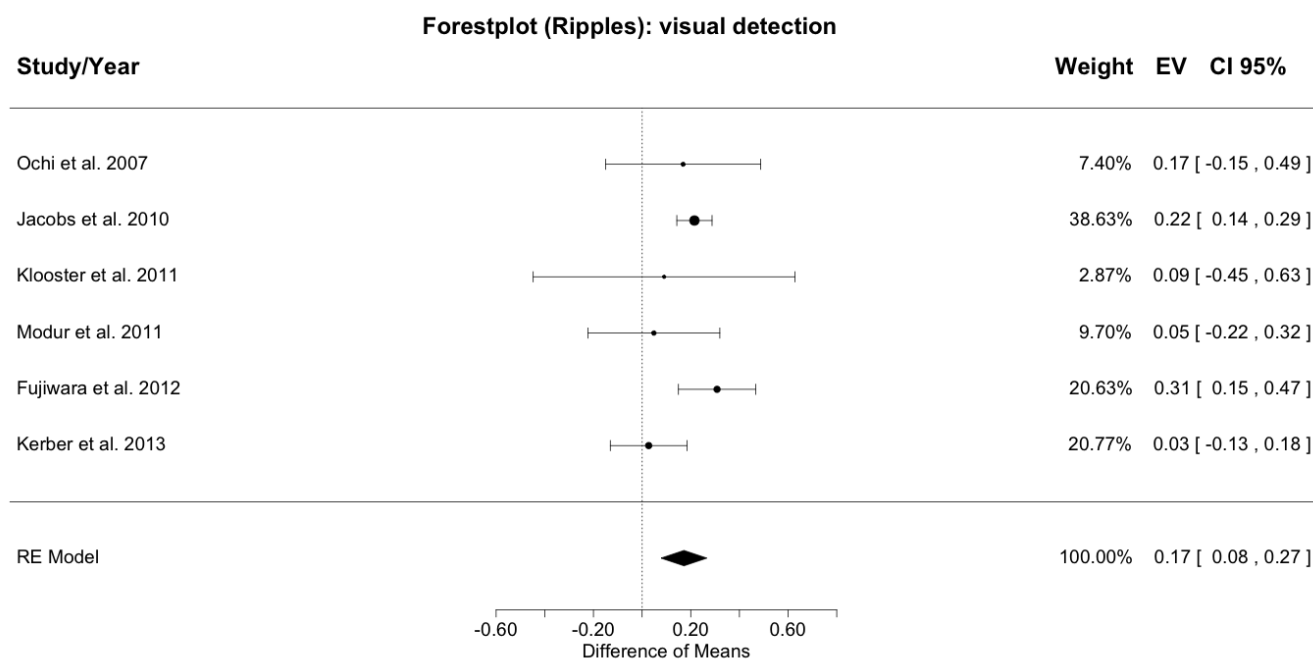[4] *Department of Neurology, Franz Tappeiner Hospital, Merano, Italy*
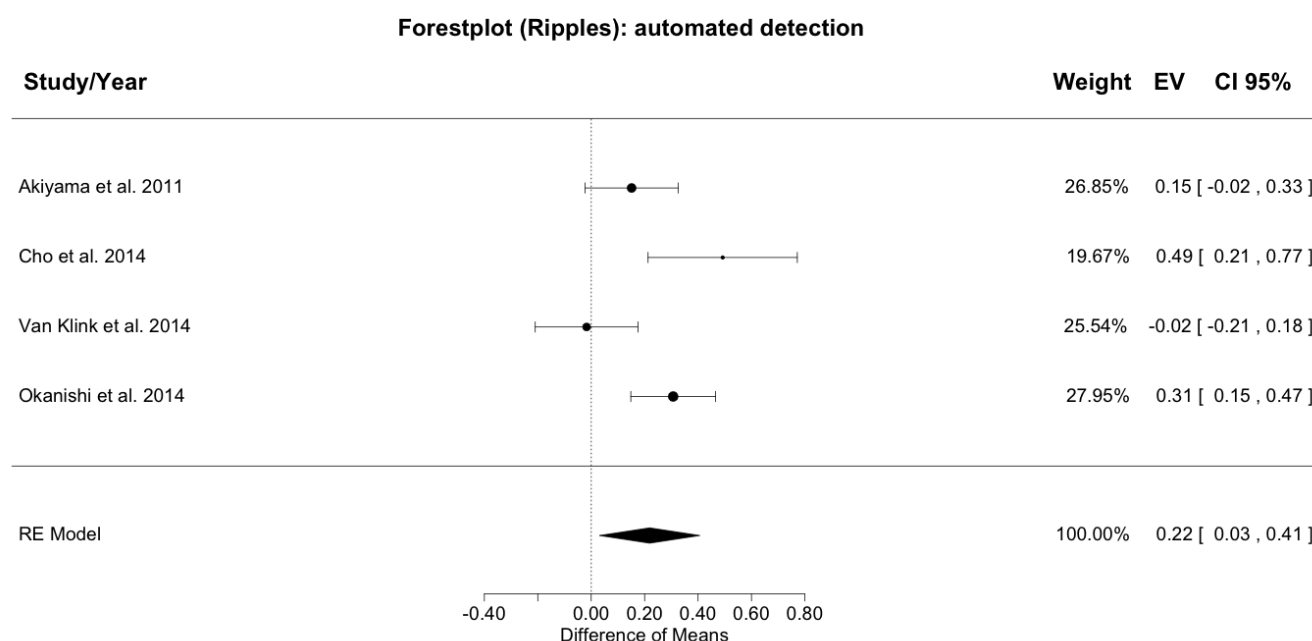
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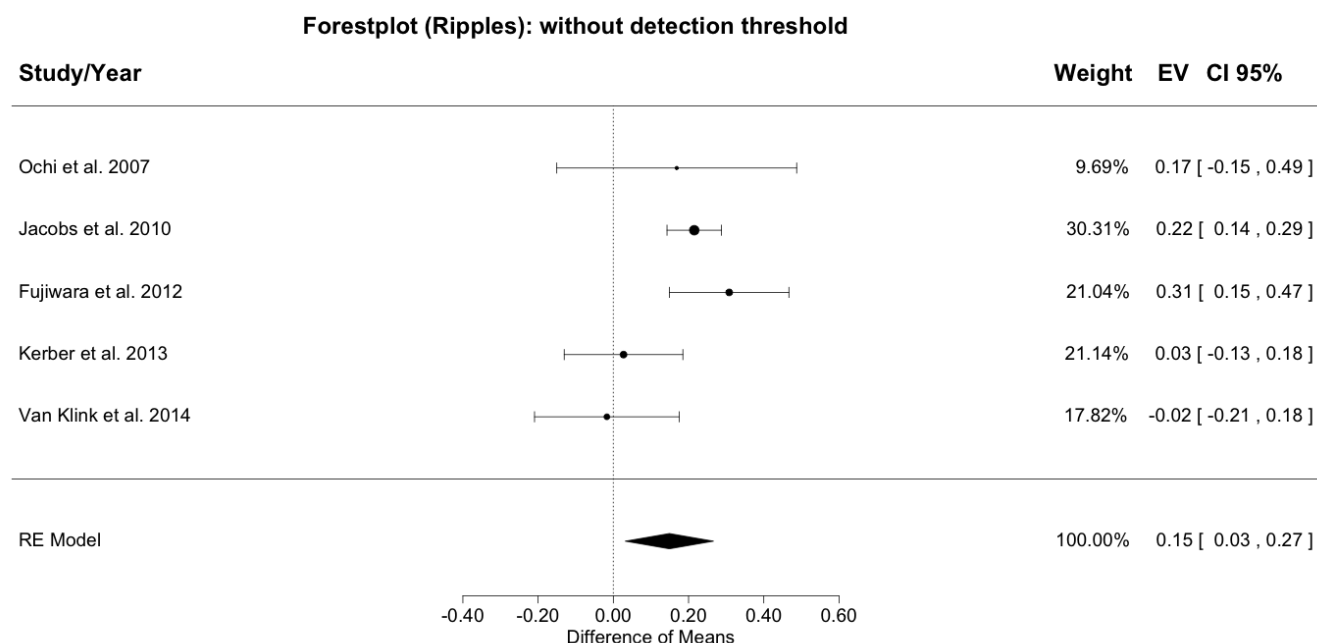Ignaz-Harrer-Str. 79, 5020 Salzburg, Austria, yvonne.hoeller@pmu.ac.at

1 SUPPLEMENTARY FIGURES

Forestplot (Ripples): visual detection

Study/Year		Weight	EV	CI 95%
Ochi et al. 2007		7.40%	0.17 [-0.15 , 0.49]
Jacobs et al. 2010		38.63%	0.22 [0.14 , 0.29]
Klooster et al. 2011		2.87%	0.09 [-0.45 , 0.63]
Modur et al. 2011		9.70%	0.05 [-0.22 , 0.32]
Fujiwara et al. 2012		20.63%	0.31 [0.15 , 0.47]
Kerber et al. 2013		20.77%	0.03 [-0.13 , 0.18]
RE Model		100.00%	0.17 [0.08 , 0.27]

-0.60   -0.20   0.20   0.60
Difference of Means

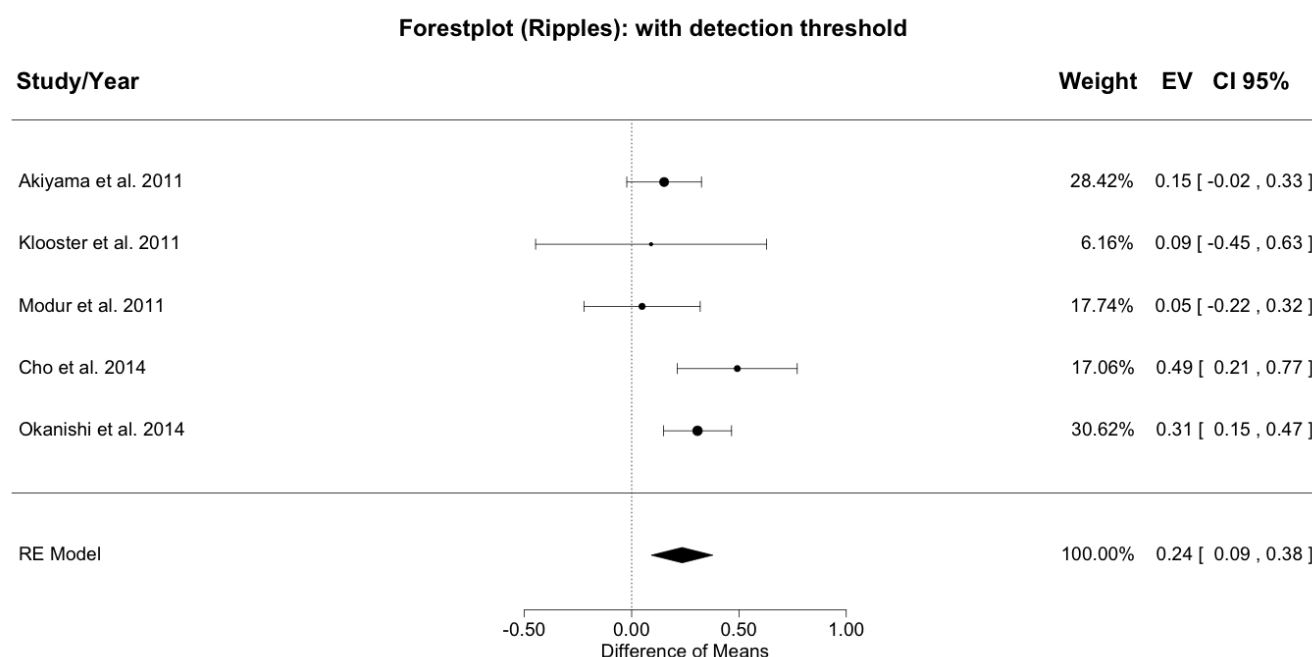 **Figure 1.** Meta-analysis results for visually detected ripples. The resection ratio is higher in seizure free patients compared to non-seizure free patients. For each study, a graphical representation of the effect (i.e. the difference of the resection ratio between the good- and bad-outcome group) and of the confidence interval (CI) is given along with the exact values (EV) and the weights.

Forestplot (Ripples): automated detection

Study/Year	Weight	EV	CI 95%
Akiyama et al. 2011	26.85%	0.15	[-0.02 , 0.33]
Cho et al. 2014	19.67%	0.49	[0.21 , 0.77]
Van Klink et al. 2014	25.54%	-0.02	[-0.21 , 0.18]
Okanishi et al. 2014	27.95%	0.31	[0.15 , 0.47]
RE Model	100.00%	0.22	[0.03 , 0.41]

-0.40   0.00 0.20 0.40 0.60 0.80
Difference of Means

Figure 2. Meta-analysis results for automatically detected ripples. The resection ratio is higher in seizure free patients compared to non-seizure free patients. For each study, a graphical representation of the effect (i.e. the difference of the resection ratio between the good- and bad-outcome group) and of the confidence interval (CI) is given along with the exact values (EV) and the weights.

Forestplot (Ripples): without detection threshold

Study/Year		Weight	EV CI 95%
Ochi et al. 2007		9.69%	0.17 [-0.15 , 0.49]
Jacobs et al. 2010		30.31%	0.22 [0.14 , 0.29]
Fujiwara et al. 2012		21.04%	0.31 [0.15 , 0.47]
Kerber et al. 2013		21.14%	0.03 [-0.13 , 0.18]
Van Klink et al. 2014		17.82%	-0.02 [-0.21 , 0.18]
RE Model		100.00%	0.15 [0.03 , 0.27]

-0.40   -0.20   0.00   0.20   0.40   0.60
Difference of Means

Figure 3. Meta-analysis results for ripples where channels were considered as HFOs regardless the frequency of HFO occurrence. The resection ratio is higher in seizure free patients compared to non-seizure free patients. For each study, a graphical representation of the effect (i.e. the difference of the resection ratio between the good- and bad-outcome group) and of the confidence interval (CI) is given along with the exact values (EV) and the weights.

Forestplot (Ripples): with detection threshold

Study/Year		Weight	EV CI 95%
Akiyama et al. 2011		28.42%	0.15 [-0.02 , 0.33]
Klooster et al. 2011		6.16%	0.09 [-0.45 , 0.63]
Modur et al. 2011		17.74%	0.05 [-0.22 , 0.32]
Cho et al. 2014		17.06%	0.49 [0.21 , 0.77]
Okanishi et al. 2014		30.62%	0.31 [0.15 , 0.47]
RE Model		100.00%	0.24 [0.09 , 0.38]

-0.50   0.00   0.50   1.00
Difference of Means

Figure 4. Meta-analysis results for ripples where channels were considered as containing HFOs only if the rate of HFO-occurrence/time interval exceeded a defined threshold. The resection ratio is higher in seizure free patients compared to non-seizure free patients. For each study, a graphical representation of the effect (i.e. the difference of the resection ratio between the good- and bad-outcome group) and of the confidence interval (CI) is given along with the exact values (EV) and the weights.